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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,574	12/19/2001	Jack Brass	16224.00046	1008
7590 08/11/2004			EXAMINER	
Katten Muchin Zavis per Richard P. Bauer East Lobby, Suite 700 1025 Thomas Jefferson Street, N.W. Washington, DC 20007-5201			BARTH, VINCENT P	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/021,574	Applicant(s) BRASS, JACK	
	Examiner Vincent P. Barth	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0204,0704</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kalley, et al., U.S. Pat. No. 6,590,220 (8 Jul. 2003), in view of Applicant's admissions of prior art.

3. Referring to Claim 35, Kalley discloses that a lamp in the form of a flashlight may be used to detect leaks in, *inter alia*, fluid systems, such as air conditioning units (col. 1, ln. 15; col. 1, ln. 22; col. 1, lns. 45-62). Kalley discloses that the lighting source should be in the form of LED's, which may emit in the UV range (i.e. below 400 nm), as well as in the visible range (i.e. 400 to 500 nm) (see col. 1, lns. 50-52; col. 2, lns. 3-5; col. 4, lns. 28-30; col. 4, lns. 54-56).

Therefore, Kalley explicitly provides for particular narrow bandwidths *within* the broader illustrative ranges in the visible and UV spectra. Accordingly, Applicant has claimed a particular range of 395-415 nm, however, such range falls within the range already set forth in Kalley. See MPEP §2144.05, (In the case where the claimed ranges 'overlap or lie inside ranges disclosed by the prior art' a prima facie case of obviousness exists), citing In re Wertheim, 541 F.2d 257, 191USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed.Cir. 1990). Concerning the spectral range, it should also be emphasized that particular

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fluorescent dyes may require a particular spectral range. Therefore, those practicing the Kalley invention would likely expect that the spectral output of the lighting device (and thus the particular LED's) would be selected depending on which dye is present, and would thus be somewhat variable. Note also, that although Kalley discloses embodiments in which filters are used in connection with the generation of light of the desired wavelength to fluoresce leak detection fluids, Kalley also explicitly discloses that the LED's may be selected to have a narrow spectral output, so as to avoid the need for filters (col. 4, lns. 54-56; col. 8, lns. 13-33). Kalley discloses that the LED's can be of a type in which the angle light emitted forms an angle of +/- 35 degrees, or less, as is desirable by those practicing the invention (col. 8, lns. 33-41). See MPEP §2144.05, (In the case where the claimed ranges 'overlap or lie inside ranges disclosed by the prior art' a prima facie case of obviousness exists), citing In re Wertheim, 541 F.2d 257, 191USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed.Cir. 1990). Moreover, Applicants do not disclose that the particular range provides a new and unexpected result over the prior art, thus the range claimed is a non-critical limitation. The MPEP §2144.05(III) states that, "the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range." In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP §716.02 - §716.02(g) for a discussion of criticality and unexpected results. Accordingly, the modification claimed over the prior art would have been obvious to those skilled in the art at the time of the invention. Continuing now with the discussion of the Kalley reference, Kalley discloses that the LED's may be a single LED, or an array (col. 8, ln. 54). Kalley discloses that the device comprises a housing (Fig. 7), and that the open end has at least one LED disposed such that the

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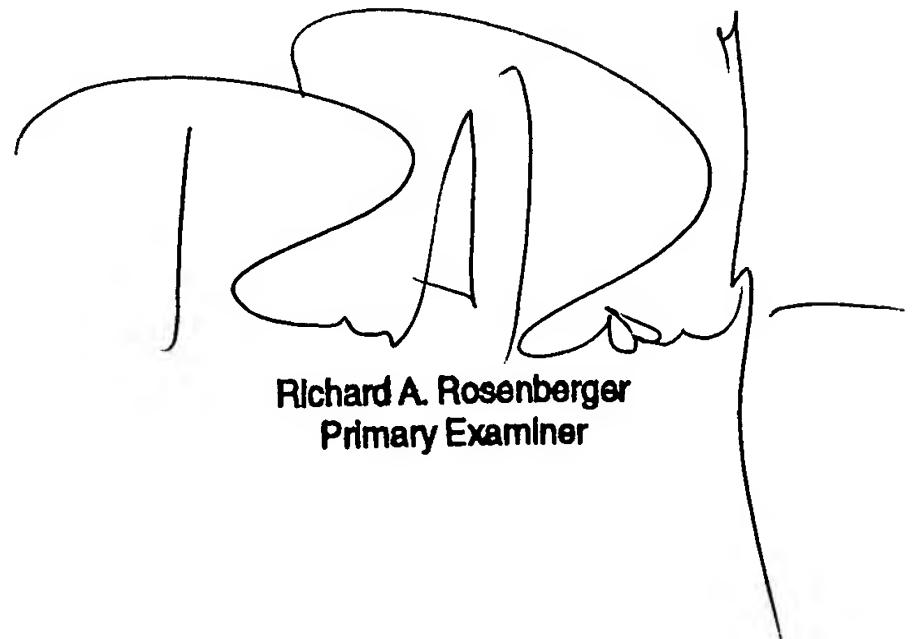
light emits outward. Kalley discloses that the LED's may be a single LED, or an array (col. 8, ln. 54), without limitation as the number of LED's. Therefore, those practicing the Kalley invention would expect to have additional LED's numbering at least 20, as might be necessary to cause the particular fluorescent dye to fluoresce. See MPEP §2144.04(VI)(B), citing, In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (mere duplication of parts has no patentable significance unless a new and unexpected result is produced.). Kalley illustrates that the lighting elements direct light directly out of the unit, without reflecting on the lighting elements, such as the LED's (Fig. 7). Kalley illustrates that the flashlight may be in the form of a handheld/untethered unit (Fig. 7). Although the Kalley reference discloses an array of LED's, the reference does not explicitly disclose that the cluster of LED's draws a total power of 7.2 Watts. However, the Kalley reference discloses that the array may be preferably 4-16 commercially available UV LED's (col. 8, ln. 33), such as those available from American Opto Plus LED's or Kwality Electronics. The instant Specification suggests Nichia Corporation as a source for LED's (Specification, pg. 14), and wherein Applicant admits that such LED's are known to draw 0.2 Watts of power. Accordingly, since the Kalley reference explicitly suggests at least a plurality of LED's, generally in the range of 4-20, the total power consumption for the Kalley device using Nichia LED's would be less than 7.2 Watt. Therefore, the limitation would have been obvious to those of skill in the art at the time of the invention, in view of Applicant's admissions of prior art. Although the Kalley reference discloses an array of LED's, the reference does not explicitly disclose that the cluster of LED's is less than 2 inches in diameter. The instant Specification suggests that as many as 36 Nichia LED's may be used in such a configuration (Specification, pg. 14), thus the diameter of each Nichia LED would be

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approximately 3 to 5 mm. The Kalley reference discloses that the array may be 4-20 commercially available UV LED's (col. 8, ln. 33), such as those available from American Opto Plus LED's or Kwalley Electronics. Such LED's are merely exemplary of those commercially available, and those practicing the invention would understand the disclosure to permit the inclusion of other commercially available LED's. Therefore, substituting another commercially available configuration of 20 Nichia LED's would result in a diameter of approximately 2 inches. Therefore, the limitation would have been obvious to those of skill in the art at the time of the invention, in view of Applicant's admissions of prior art.

CONCLUSION

4. Applicant's Claim 35 is rejected based on the reasons set forth above.
5. Applicant has canceled Claims 1-34.
6. Any inquiries concerning this communication from the Examiner should be directed to Vincent P. Barth, whose telephone number is 571-272-2410, and who may be ordinarily reached from 9:00 a.m. to 5:30 p.m., Monday through Friday. The fax number for the group before final actions is 703-872-9306.
7. If attempts to reach the Examiner prove unsuccessful, the Examiner's supervisor is Gregory J. Toatley, Jr., who may be reached at 571-272-2800, ext. 77.
8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Richard A. Rosenberger
Primary Examiner